

From: Marc Bowman <Marc.E.Bowman@mwhglobal.com>
Sent: Monday, March 17, 2014 1:05 PM
To: Rochlin, Kevin
Cc: Sheldrake, Beth; Greutert, Ed [USA]; Barbara Ritchie; Kelly Wright; susanh@ida.net; Bruce.Olenick@deq.idaho.gov; Douglas.Tanner@deq.idaho.gov; Scott.Miller@deq.idaho.gov; Jeff Hamilton; Marguerite Carpenter; David Heineck; Mike Steiner; Rob Hartman
Subject: FMC Plant OU RDRA Monthly Report #9 - February 2014
Attachments: 2014-03-17 FMC Plant OU RDRA Order Monthly Report #9 - February 2014.pdf

Kevin:

Please find attached the FMC OU RDRA Monthly Report #9 for February 2014 as required under Paragraph 55 of the FMC Plant OU RDRA Unilateral Administrative Order reporting on the status of implementation of the Remedial Design / Remedial Action work. This report covers the time period from February 1 to February 28, 2014.

Marc Bowman
MWH Americas, Inc.
(801) 617-3234



Via email

March 17, 2014

Kevin Rochlin
Remedial Project Manager, Superfund Program
US EPA, Region 10
1200 Sixth Avenue
Seattle, WA 98101

RE: MONTHLY REPORT NO. 9 – FEBRUARY 2014
FMC Operable Unit of the Eastern Michaud Flats Superfund Site
Unilateral Administrative Order for Remedial Design and Remedial Action
Docket No. CERCLA-10-2013-0116

Dear Mr. Rochlin,

This is the monthly report concerning the FMC Plant OU (the site) submitted pursuant to Paragraph 55 of the subject Unilateral Administrative Order for Remedial Design and Remedial Action (UAO), effective June 20, 2013. This report describes the time period between February 1, 2014 and February 28, 2014.

a) ACTIONS TAKEN DURING THE TIME PERIOD:

- Submitted deliverables (listed in item c below) and began preparation of deliverables (listed in item d below) as required based on the effective date of the subject UAO

b) SUMMARY OF SAMPLING RESULTS AND DATA RECEIVED DURING THE TIME PERIOD

- None

c) PLANS, REPORTS AND OTHER DELIVERABLES SUBMITTED DURING THE TIME PERIOD

- Received EPA approval of the *Extraction Zone Hydrogeologic Study Work Plan* (EZHWP) on February 6, 2014.
- Received EPA comments on the *Data Gap Investigation Report* on February 20, 2014. In an email dated March 3, 2013, EPA granted an extension until March 14, 2014 for FMC to submit response to these comments and to provide a revised *Data Gap Investigation Report*.
- On March 3, 2014, submitted *Soil Remedial Action - Engineering Design Submittal*. As detailed in the submittal the site-wide grading and stormwater design and plans were submitted at the Pre-final (90%) Remedial Design (RD) level and the gamma and ET

cap designs were submitted at the Preliminary (30%) RD level. This submittal package included:

- Soil Remedial Action - Engineering Design
 - Remedial Design Report
 - Remedial Design Drawings
 - Remedial Design Calculations
 - Technical Specifications
 - Construction Quality Assurance Plan
 - Site-wide Stormwater Management Design Report
 - Supporting Documents
 - Draft Emergency Response Plan, including the Spill Prevention, Control and Countermeasure Plan
 - Draft Transportation and Off-site Disposal Plan
 - Preliminary Draft Soil Remedy Performance Standards Verification Plan
 - Preliminary Draft Soil Remedy Operations, Monitoring and Maintenance Plan
 - Draft Institutional Controls Implementation and Assurance Plan
- On March 6, 2014, FMC and EPA participated in a conference call to discuss the proposed approach to respond to EPA comments and recommendations on the *Gamma Cap Performance Evaluation Report*. FMC also summarized the *Soil Remedial Action - Engineering Design Submittal* during this call.
 - On March 12, 2014, FMC submitted via email a schedule for fieldwork to conduct the groundwater investigations as included in the EZHWP which was approved on February 6, 2014.
 - On March 14, 2014, FMC submitted an electronic response to EPA comments on the *Data Gap Investigation Report* received on February 20, 2014 and an electronic revision to the *Data Gap Investigation Report* which was highlighted to indicate changes made in response to EPA comments.

d) ACTIONS SCHEDULED FOR THE NEXT TWO MONTHS

- In response to Agency comments received on January 29, 2014 on the *Gamma Cap Performance Evaluation Report* and input during the March 6 conference call, FMC will prepare and submit a framework document proposing additional gamma cap performance testing. Tentative submittal date is March 21, 2014.
- Targeted schedule for implementation of EZHWP field work is as follows:
 - March 24: Mobilization on site.
 - March 25 – 29: Drilling and installation of extraction wells.
 - March 31 – April 5: Drilling and installation of extraction wells.
 - April 7 – April 12: Drilling and installation of piezometers.
 - April 14 – April 23: Extraction Well and Piezometer development and aquifer testing.

e) UNRESOLVED DELAYS ENCOUNTERED OR ANTICIPATED THAT MAY AFFECT THE SCHEDULE FOR IMPLEMENTATION OF WORK AND EFFORTS TO MITIGATE

- There are currently no unresolved delays encountered or anticipated, actual and anticipated modifications to the schedule are described in item f below.

f) MODIFICATIONS TO WORK PLANS OR SCHEDULES PROPOSED

- Attached are the updated RD/RA Preliminary Schedules for soil and groundwater remedies (Revision 5.0 to Tables 6-1 and 6-2 of the RDWP).
- As described in item c. above, FMC submitted the *Soil Remedial Action - Engineering Design Submittal* on March 3, 2014. With timely EPA review and approval of these design submittals, site grading should commence during the 2014 construction season. Site-wide grading that creates an integrated stormwater management system is a required precursor to cap construction and is otherwise independent of and does not prejudice the final cap designs (i.e., gamma and ET caps). The schedule for these deliverables has been added to the RD/RA Preliminary Schedule for the soil remedy as summarized below:

RD Deliverable / Work Element	Date
Submitted <i>Soil Remedial Action - Engineering Design Submittal</i> ; Site-Wide Grading and Stormwater Design and Plans were submitted at the Pre-final (90%) RD level and gamma and ET cap designs were submitted at the Preliminary (30%) RD level.	March 3, 2014
EPA Comments on 30% RD Package and Site-Wide Grading and Stormwater Design and Plans at the Pre-final (90%) RD level	May 2, 2014
Submit Final (100%) RD Package for Site-Wide Grading and Stormwater Design and Plans	June 2, 2014
EPA approval for Site-Wide Grading and Stormwater Design and Plans	June 30, 2014
Pre-Construction Inspection and Meeting	July 7, 2014
Start of Site-Wide Grading Construction	July 9, 2014

- As described in item d. above, in response to Agency comments received on January 29, 2014 on the *Gamma Cap Performance Evaluation Report* and input during the March 6 conference call, FMC will prepare and submit a framework document proposing additional gamma cap performance testing. The RD/RA Preliminary Schedule for the soil remedy has been revised to include submittal of that framework document,

subsequent work plan and field implementation of the additional gamma cap study and development of a final gamma cap performance evaluation report. Based on the schedule for the additional gamma cap study, the preliminary schedule includes a re-forecast for submittal of the Pre-final (90%) and Final RD and draft and final Remedial Design Work Plans for the entire soil remedy which will be focused on the gamma and ET cap design and plans.

If you have any questions concerning the monthly report, please feel free to call Marc Bowman at (801) 617-3234, Rob Hartman at (801) 617-3256, or Barbara Ritchie at (215) 299-6700.

Sincerely,



Marc Bowman
Project Director
MWH Americas, Inc.



Rob Hartman
RD Manager
MWH Americas, Inc.

cc: (as required under the UAO and as directed by EPA)

Bruce Olenick, IDEQ

Doug Tanner, IDEQ

Scott Miller, IDEQ

Kelly Wright, Shoshone-Bannock Tribes

Susan Hansen, Shoshone-Bannock Tribes

Soil Remedial Design / Remedial Action Preliminary Schedule (Rev 5.0)

RD Deliverable/Work Element	Schedule per UAO	Baseline ¹ Planned	Revised Plan	Actual
Remedial Design Work Plan				
Submit Remedial Design Work Plan (RDWP)	W/in 45 days EPA approval SC			8/12/2013
EPA Comments on RDWP	NS	9/13/2013		10/28 and 12/12/2013
Submit Final RDWP	14 days or as specified by EPA	9/27/2013		12/19/2013
EPA Approval RDWP	NS	10/14/2013		12/19/2013
Performance Testing (PT) Work Plans - Soil Remedy				
RD Data Gap (DG) Acquisition Work Plan	W/in 60 days EPA approval SC			7/15/2013
Gamma Cap (GC) Performance Evaluation Work Plan	W/in 60 days EPA approval SC			7/15/2013
EPA approval of GC WP	NS	8/16/2013		9/5/2013
EPA approval of DG WP	NS	8/16/2013		10/22/2013
Execute PTs to Support Soil Remedial Design				
PT Field Work	Per DG/GC Work Plans	8/26 to 9/27/2013		9/11 to 11/13/2013
Submit GC / DG PT Reports	Per DG/GC Work Plans	10/25/2013		11/25/2013 / 1/28/14
EPA Comments on GC / DG PT Reports	NS	11/22/2013		1/29/14 / 2/20/14
Submit Final DG PT Report	14 days or as specified by EPA	11/29/2013		3/14/2014
EPA approval DG PT Report	NS	12/16/2014	4/30/2014	
Additional Gamma Cap Study (AGCS) ²				
Submit Framework for AGCS	NS	NA	3/21/2014	
EPA comments on Framework for AGCS	NS	NA	4/4/2014	
Submit Work Plan for AGCS	NS	NA	4/18/2014	
EPA comments on AGCS Work Plan	NS	NA	6/18/2014	
Submit revised AGCS Work Plan	14 days or as specified by EPA	NA	7/2/2014	
EPA approval AGCS Work Plan	NS	NA	7/18/2014	
AGCS Field Work	NS	NA	7/21 to 8/8/14	
Submit revised GC / AGCS PT Report	Per AGCS Work Plan	NA	9/23/2014	
EPA Comments on GC / AGCS PT Report	NS	NA	11/21/2014	
Submit Final GC / AGCS PT Report	14 days or as specified by EPA	NA	12/5/2014	
EPA approval GC / AGCS PT Report	NS	NA	12/19/2014	
Remedial Design - Site-Wide (SW) Grading and Stormwater Management System (SMS) and Stormwater Pipe (SWP) and RA-J Elements ³				
Submit Soil Remedy - 90% Design Package for SW Grading and SMS and SWP / RA-J	45 days after EPA approval of GC/DG PT reports	1/27/2014 (Original 30% Soil)		3/3/2014
EPA Comments on 90% Design Package for SW Grading and SMS and SWP / RA-J	NS	3/6/2014	5/2/2014	
Submit Final Design Package and RAWP for SW Grading and SMS and SWP / RA-J	21 days after receipt of EPA comments on Pre-final RD	6/26/2014	6/2/2014	
EPA Approval Final Design and RAWP for SW Grading and SMS and SWP / RA-J	NS	NA	6/30/2014	
Remedial Contractor Procurement - Site-Wide (SW) Grading and SMS and SWP and RA-J Elements ³				
Bid Package Preparation - Soil Remedy	NS	NA	3/17/2014	
Evaluate Bids / Recommendation	NS	NA	4/30/2014	
Soil Remedial Action - Site-Wide (SW) Grading and SMS and SWP and RA-J Elements ³				
Award Contract for SW Grading and SMS	45 days after EPA approval RAWP	7/10/2014	5/23/2014	
Pre-Construction Inspection and Meeting	30 days after Award RA Contract	7/17/2014	7/7/2014	
Start of Construction SW Grading and SMS	15 days after Pre-Con Meeting	7/28/2014	7/9/2014	

Soil Remedial Design / Remedial Action Preliminary Schedule (Rev 5.0)

RD Deliverable/Work Element	Schedule per UAO	Baseline ¹ Planned	Revised Plan	Actual
Remedial Design - Gamma and ET Caps				
Submit Soil Remedy - 30% Design Package for Gamma and ET Caps	45 days after EPA approval of GC/DG PT reports	1/27/2014		3/3/2014
EPA Comments on 30% RD Package for Gamma and ET Caps	NS	3/6/2014	5/2/2014	
Submit Soil Remedy Pre-Final (90/95%) RD Package for Gamma and ET Caps	120 days after receipt of EPA comments on 30% RD	5/1/2014	12/19/2014	
EPA Comments on Pre-Final RD Package for Gamma and ET Caps	NS	5/29/2014	2/17/2015	
Submit Soil Remedy Final RD Package (Integrated for SW Grading, SMS, Gamma and ET Caps)	21 days after receipt of EPA comments on Pre-final RD	6/26/2014	3/10/2015	
Remedial Action Work Plan - Gamma and ET Caps				
Submit Draft RAWP Soil Remedy	Concurrent with Pre-Final RD	5/1/2014	12/19/2014	
EPA Comments on RAWP Soil Remedy	NS	5/29/2014	2/17/2015	
Submit Final RAWP Soil Remedy	Concurrent with Final RD	6/26/2014	3/10/2015	
Remedial Contractor Procurement - Gamma and ET Caps				
Bid Package Preparation - Soil Remedy	NS	5/5/2014	3/10/2015	
Evaluate Bids / Recommendation	NS	6/26/2014	4/17/2015	
EPA Approval Soil Remedy Final RD and RAWP	NS	7/7/2014	4/7/2015	
Soil Remedial Action - Gamma and ET Caps				
Award Contract for Gamma and ET Caps	45 days after EPA approval RAWP	7/10/2014	4/7/2015	
Pre-Construction Inspection and Meeting	30 days after Award RA Contract	7/17/2014	4/15/2015	
Start of Construction - Gamma and ET Caps	15 days after Pre-Con Meeting	7/28/2014	4/20/2015	
Institutional Control Program				
Institutional Control Implementation and Assurance Plan	Submit with 30% RD for Soil RA	1/27/2014		3/3/2014
EPA Comments on ICIAP	NS	4/28/2014	9/12/2014	
Submit Final ICIAP	14 days or as specified by EPA	5/12/2014	9/26/2014	
EPA Approval ICIAP	NS	6/11/2014	10/24/2014	
Implement ICIAP	Per ICIAP	_____	_____	

1 Baseline schedule is the Planned schedule from Table 6-1 of the draft RDWP, August 2013.

2 Per EPA 1/29/14 comments and recommendations on the Gamma Cap Performance Evaluation Report as discussed in 3/6/14 conference call, 4/18/14 is the target date for FMC's response to EPA comments on the GCPE Report and submittal of a work plan for additional study.

3 The stormwater pipe element is for cleaning and removal of sediment within the stormwater piping and the RA-J element is excavation of upper 6 inches of soil and removal / transport onto the FMC Plant Site for use as general fill during site-wide grading.

NS means no schedule (timeframe) specified in UAO.

NA means the item was not included in the baseline schedule.

Groundwater Remedial Design / Remedial Action Preliminary Schedule (Rev 5.0)

RD Deliverable/Work Element	Schedule per UAO	Baseline ¹ Planned	Revised Plan	Actual
Remedial Design Work Plan				
Submit Remedial Design Work Plan	W/in 45 days EPA approval SC			8/12/2013
EPA Comments on RDWP	NS	9/13/2013		10/28 and 12/12/2013
Submit Final RDWP	14 days or as specified by EPA	9/27/2013		12/19/2013
EPA Approval RDWP	NS	10/14/2013		12/19/2013
Performance Testing (PT) Work Plans - Groundwater Remedy				
Groundwater Extraction Zone Hydrogeologic (EZH) Work Plan	W/in 60 days EPA approval SC			7/15/2013
EPA Comments on GW EZH Work Plan	NS	8/16/2013		9/16 and 12/6/2013
Submit Final Groundwater EZH Work Plan	14 days or as specified by EPA	NA		1/10/2014
EPA approval of Groundwater EZH Work Plan	NS	8/16/2013		2/6/2014
Execute PTs to support Groundwater (GW) Remedial Design				
PT Field Work	Per GW EZH Work Plan	8/26 to 11/8/2013	3/24 to 5/2/2014	
Submit GW EZH Report	Per GW EZH Work Plan	1/10/2014	7/1/2014	
EPA Comments on GW EZH Report	NS	2/7/2014	9/24/2014	
Submit Final GW EZH Report	14 days or as specified by EPA	2/14/2014	10/1/2014	
EPA approval GW EZH Report	NS	2/28/2014	10/29/2014	
Remedial Design - Groundwater Remedy				
Submit Groundwater Remedy - 30% Design Package	45 days after EPA approval of GW EZH Report	3/24/2014	12/12/2014	
EPA Comments on 30% RD Package	NS	4/21/2014	2/12/2015	
Submit Groundwater Remedy - 60% Design Package	90 days after EPA comments on 30% RD	7/21/2014	4/9/2015	
EPA Comments on 60% RD Package	NS	8/22/2014	6/10/2015	
Submit Pre-Final (90/95%) Groundwater RD Package	90 days after receipt of EPA comments on 60% RD	10/24/2014	8/5/2015	
EPA Comments on Pre-Final RD Package	NS	11/24/2014	10/6/2015	
Submit Groundwater Remedy Final RD Package	21 days after receipt of EPA comments on Pre-final RD	12/15/2014	11/3/2015	
Remedial Action Work Plan - Groundwater Remedy				
Submit Draft RAWP Groundwater Remedy	Concurrent with Pre-Final RD	10/24/2014	8/5/2015	
EPA Comments on RAWP	NS	11/24/2014	10/6/2015	
Submit Groundwater Remedy Final RAWP	Concurrent with Final RD	12/15/2014	11/3/2015	
Remedial Contractor Procurement				
Bid Package Preparation Groundwater Remedy	NS	10/30/2014	11/10/2015	
Evaluate Bids / Recommendation	NS	12/19/2014	12/15/2015	
EPA Approval Groundwater Remedy Final RD and RAWP	NS	1/15/2015	12/3/2015	
Groundwater Remedial Action				
Award RA Contract - Groundwater	45 days after EPA approval RAWP	3/1/2015	1/19/2016	
Pre-Construction Inspection and Meeting	30 days after Award RA Contract	3/31/2015	2/17/2016	
Start of Construction	15 days after Pre-Con Meeting	4/14/2015	3/2/2016	

¹ Baseline schedule is the Planned schedule from Table 6-2 of the draft RDWP, August 2013.

NS means no schedule (timeframe) specified in UAO.

NA means the item was not included in the baseline schedule.